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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,784	12/08/2003	Akira Ichihashi	524941/0023	4819

7590 07/05/2005

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EXAMINER

VO, ANH T N

ART UNIT	PAPER NUMBER
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2861

DATE MAILED: 07/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/730,784

Applicant(s)

ICHIHASHI ET AL.

Examiner

Anh T.N. Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/8/03 & 4/7/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The references cited on PTO 1449 have been considered.

CLAIM REJECTIONS

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 5, 7-9 and 11-15 are rejected under 35 USC 102 (a) as being anticipated by Hara et al. (EP 1258359A1).

Note: The method steps are inherently taught in the apparatus device/limitations in the rejections as follow:

Hara et al. discloses in Figures 2-4 and 7 an ink cartridge comprising:

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- a liquid cartridge body (2) which includes a liquid containing section for containing therein liquid and a liquid supplying section (4) for supplying the liquid to the outside of the cartridge body (2);
- a valve member (52) which is elastically deformable to open in accordance with a pressure difference generated between the liquid containing section (2) and the liquid supplying section (4), said valve member (52) comprising a cylindrical peripheral edge (52a);
- a valve lid (53) comprising a substantially cylindrical valve member holding part inserting inside said peripheral edge (52a) of said valve member (52) for fixing said peripheral edge;
- an urging member (50) provided between said valve member (52) and said valve lid (53) for urging said valve member (52) in a direction away from said valve lid (53) (column 9, lines 43-54 and column 10, lines 6-15).
- wherein said urging member (50) is a coil spring, said valve lid (53) comprises a spring fitting part (53a) of a cylindrical shape, of which an inner diameter is substantially the same as an outer diameter of said coil spring, projecting to face said valve member (52) at a position on which said coil spring is in contact, and said coil spring (50) is held in said valve lid (53) by being fitted into said spring fitting part (53);
- wherein said spring fitting part (53a) has a notch enabling a liquid to flow into and/or out of said spring fitting part, even though said valve member (52) is attached to said spring fitting part (53a); and
- wherein said spring fitting part (53a) has a plurality of notches cut in from said valve member, and at least one of lengths of a plurality of projecting pieces in a surface direction formed by said plurality of notches (53a) is larger than an inner diameter of said coil spring (50).

Claims 1-7 and 10-16 are rejected under 35 USC 102 (a) as being anticipated by Yonekubo (JP 2002-205413).

Note: The method steps are inherently taught in the apparatus device/limitations in the rejections as follow:

Yonekubo discloses in Figures 1-6 an ink cartridge comprising:

- a liquid containing section (2b) for containing a liquid;
 - a cartridge body (1) which comprises a liquid supplying part (4) for supplying a liquid in said liquid containing section (2b) to the outside;
 - a valve member (15) contained in a concave part formed at said cartridge body (1) to be opened when a pressure difference between said liquid containing section (2b) and said liquid supplying part (4) occurs (Figures 1 and 3b);
- a valve lid (20) for holding said valve member (15) by being fitted into said concave part and besides pressing an outer circumference of said valve member (15) toward a wall face of said concave part, wherein a projection is formed on a surface, with which said valve member (15) is in contact, of said wall face in said concave part to be in pressure contact with said valve member along said outer circumference of said valve member (15) (Figure 3b).
- a seal member (16) for sealing to urge an outer surface opposite to a surface, on which said valve member (15) is provided, of said valve lid (20) and a wall face of said cartridge body around said outer surface of said valve lid toward a direction in which said valve lid is in contact with said projection, wherein said concave part is formed on said wall face of said cartridge body;
 - wherein said valve member (15) is formed of an elastic material, and said projection is in pressure contact, deforming said valve member (Figure 3b);
 - a valve member (15) which is elastically deformable to open in accordance with a pressure difference generated between the liquid containing section (2b) and the liquid supplying section (4), said valve member (15) comprising a cylindrical peripheral edge;
 - a valve lid (20) comprising a substantially cylindrical valve member holding part inserting inside said peripheral edge of said valve member (15) for fixing said peripheral edge;
 - an urging member (13) provided between said valve member (15) and said valve lid (20) for urging said valve member (15) in a direction away from said valve lid (20) (Figures 3a-3b); and
 - said valve lid (20) further comprises a wall surface contact part of a substantially cylindrical shape, of which an inner diameter is larger than an outer diameter of said peripheral edge part of said valve member (12), surrounding said valve member holding part, being in contact with a

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wall face of a concave part formed at said cartridge body to which said valve lid is attached (Figures 3-a-3b).

Citation of Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art references (US Pat. 6,585,358; US Pat. 6,666,551; US Pat. 6,837,575) cited in the PTO 892 form show an Ink cartridge that is deemed to be relevant to the present invention. These references should be reviewed.

CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Anh Vo whose telephone number is (571) 272-2262. The examiner can normally be reached on Tuesday to Friday from 8:00 A.M. to 6:00 P.M.. The fax number of this Group 2861 is (703) 872-9306.


ANH T.N. VO
PRIMARY EXAMINER

June 30, 2005